



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
JANUARY 8, 1997, 9:00 A.M.
EXECUTIVE CONFERENCE ROOM**

Present:	T. A. Coleman	G. D. Taylor	R. S. Cadena (S. E. Hohl)
	J. D. Culp	E. Savas	J. W. Reincke
	T. Fort	E. D. Winkler	W. C. Turner

Guest:	I. B. Patel	S. Bower
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OLD BUSINESS

1. Approval of the Minutes of the December 4, 1996, Meeting -T. A. Coleman

Minutes of the December 4, 1996, meeting were approved. Discussion took place regarding availability and timeliness of the draft minutes. Tom Coleman directed the draft minutes be available seven to ten days following our meetings.

2. Resubmittal (September 5, 1996, New Business, Item 1) of Research Report R-1342, Inspection and Repair of High-Mast Luminaires - J. W. Reincke

The previously submitted report was revised to include a more complete description of the number of high-mast luminaire structures that were inspected. The action recommendations were reviewed and further discussion brought out the need to review or investigate other problems and concerns with A-588 luminaires. Ernie Savas expressed his thoughts about electrical problems caused by pack rust building up behind the electrical control junction boxes in the base of the towers, and the incompatible junction box materials. Pack rust occurs when air and condensation drainage are blocked at the base (see recommendations). Also, the repair collar has caused some difficulty when raising and lowering the lighting fixture ring. The inherent rust associated with A-588 steel is abrading the insulation on the power feeds (cables) on the interior of the towers when raising and lowering the lighting fixture for maintenance.

Metro District has found two cases where threads on the anchor rods have deteriorated in the area of the flange of the tower base. This has been evident on towers that are 25 years old. As a result, the cross-section of the anchor rod has been reduced. Districts should be advised of the A-588 HML problems and review each installation for replacement or elimination if no longer warranted by current lighting standards.

ACTION: The research report is approved. The Materials and Technology Division will distribute the report and will include a special cover letter to the districts with A-588 HML structures advising them of the potential problems and actions

that may be necessary. The Materials and Technology Division will also review Metro's specific concerns with district staff. Districts are advised to review their A-588 HML installations and take appropriate action for their replacement or removal as warranted.

3. **Status Report on MDOT/Industry Committee Activities Regarding Concrete and Bituminous Warranties (See Old Business, Item 2 of the December 4, 1996, Minutes) - E. D. Winkler/W. C. Turner**

Progress continues to be made following a meeting with industry and representatives from bonding companies. Since several areas besides concrete and bituminous paving are working on warranties, it is now a priority to get the various warranty areas together to develop and use the same boiler plate language for commonality. The duration of warranties will be a key factor in their success. The bonding companies advised that three year warranties are about the maximum - most of our product failures or shortcomings are recognizable within one to five years. The bonders also recommended we refer to them as maintenance or warranty bonds, not performance bonds, which cost 50 percent more. Progress will continue and more updates will be forthcoming.

4. **Ground In Rumble Strips Update (See Old Business, Item 3 of the December 4, 1996, Minutes) - W. C. Turner**

The Design Recommendation Committee (DRC) will meet on January 9, 1997, to further consider the issue. At the meeting, a representative from a Pennsylvania grinding company will make a presentation. Bil reported a grinding pattern has been selected for both bituminous and concrete work. Two demonstration projects are planned: I-75 in Detroit, and US-27 in Gratiot County. A request was made that the DRC give consideration to placing the rumble strip outside the wheel path if the shoulder might eventually be used as a temporary driving lane.

ACTION: The next update will be presented at the February meeting.

5. **Corridor Basis Construction (See Old Business, Item 4, of the December 4, 1996, Minutes) - C. J. Arnold/W. C. Turner**

There is nothing to report at this time.

ACTION: Chuck Arnold will report on progress at the February meeting.

NEW BUSINESS1. **District Engineer Representative for 1997 - T. A. Coleman**

Ernie Savas, Metro District Engineer, was welcomed as the new District Engineer Representative for 1997. He replaces Tom Maki from Kalamazoo. Thanks, Tom, for your service and participation on the committee!

2. **Projects Requiring EOC Approval of Pavement Selection - W. C. Turner/S. Bower**

Bil Turner made an excellent presentation to the Transportation Commission, and they decided \$1 million is the appropriate threshold for projects requiring EOC approval.

No further discussion or action is necessary.

3. **Pavement Selection, Reconstruction Project, C.S. 82122, J.N. 38079, I-96/M-14 Haggerty Road to Newburg Road (2.0 km [1.25 miles]) Metro District - I. B. Patel**

Three reconstruction alternates were presented, two concrete and one bituminous.

Decision - Approve concrete alternate 1A as follows:

300 mm (12 in. ±)	Non-Reinforced Concrete (5 m - 16 ft jt spacing)
140 mm (5½ in. ±)	Bituminous Shoulders
100 mm (4 in. ±)	Open Graded Drainage Course
	Geotextile Separator
230 mm (9 in.)	Ex. Sand Subbase - Salvage Ex. Underdrains
100 mm	Add Open Graded Underdrains

ACTION: Design will proceed, as required, to meet a July 1997 completion date.

NOTE: A user cost policy (as recently promised to the Transportation Commission) will be implemented in 1997 and this project will serve as one of the test evaluations. A memo of explanation and documentation will be sent to Mr. Welke explaining the transition/interim process for including user costs in the pavement selection process.

4. **Pavement Selection, Reconstruction Project, C.S. 82061, J.N. 38063, US-12 Eastbound, Heywood Road to 4th Street (1.77 km [1.1 miles]), Metro District - I. B. Patel**

Three reconstruction alternates were presented, two concrete and one bituminous.

Decision - Approve concrete alternate 1A as follows:

220 mm (8.5 in. ±)	Non-Reinforced Concrete Pavement (4.5 m - 14 ft jts)
	Curb and Gutter - No Shoulders
100 mm (4 in. ±)	Open-Graded Drainage Course
	Geotextile Separator
250 mm (10 in. ±)	Ex. Sand Subbase, Add Open Graded Underdrains

ACTION: Design will proceed, as required, to meet the March 1997 plan completion date.

NOTE: A user cost policy (as recently promised to the Transportation Commission) will be implemented in 1997 and this project will serve as one of the test evaluations. A memo of explanation and documentation will be sent to Mr. Welke explaining the transition/interim process for including user costs in the pavement selection process.

(Signed Copy on File at M&T)

Jon W. Reincke for
Calvin Roberts, Secretary
Engineering Operations Committee

JWR:kat

cc: EOC Members

District Engineers

R. A. Welke	R. J. Risser, Jr. (MCPA)	L. K. Heinig	T. Adams (MCA)
D. L. Coleman	A. C. Milo (MRBA)	G. H. Grove	R. D. Till
D. L. Smiley	J. Becsey (MAPA)	R. W. Muller	R. E. Nordlund
L. E. DeFrain	G. L. Mitchell	G. J. Bukoski	C. W. Whiteside
I. B. Patel	M. Newman (MAA)	J. Steele (FHWA)	K. Rothwell
S. Bower	M. Frierson	R. J. Lippert, Jr.	C. Libiran
B. Richter			